5087

FACILITY CONDITION
ASSESSMENT

LOUDOUN COUNTY; DEPARTMENT OF GENERAL SERVICES
211 Gibson Street, Northwest, Suite 123
Leesburg, Virginia 20176
Manager, Technical Services Division

FACILITY CONDITION ASSESSMENT
of
SHENANDOAH OFFICE BUILDING
102 Heritage Way
Leesburg, Virginia 20176

PREPARED BY:

EMG
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REVIEWED BY:

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EMG Project #: 79334.06R-002.138
Date of Report: December 7, 2006
On site Date: August 22, 2006

Deficiency Cost Table
By Building and Year

City: Leesburg
Address: 102 Heritage Way
Leesburg, VA 20176

Building: Shenandoah Ofc. Bldg.
Year Built: 1990

Report Subtotal: $1,832,467.00 **Report Total Cost:** $2,207,914.69

Priority	Replacement Year	Sub Elements	Elements Description	Room Name	Room#	Quantity	Cost per Unit	Unit	Total Cost	Inflated Total Cost
Priority 1										
	2007	Paving & Surfacing	Cut & Patch asphalt		General	400	$3.00	sf	$1,295.00	$1,295.00
								Total:	$1,295.00	$1,295.00
Priority	**Replacement Year**	**Sub Elements**	**Elements Description**	**Room Name**	**Room#**	**Quantity**	**Cost per Unit**	**Unit**	**Total Cost**	**Inflated Total Cost**
Priority 2										
	2008	Windows	Replace wood windows		General	230	$470.00	ea	$116,640.00	$119,556.00
	2008	Signage	ADA signage		General	2	$120.00	ea	$259.00	$265.48
	2008	Exterior Steps & Ramps	Install ADA compliant handrails for ramp		General	40	$17.00	lf	$734.00	$752.35
	2008	Floor Finishes	Replace carpet		General	6111	$22.00	sy	$145,063.00	$148,689.58
	2008	Painted Lines & Markings	Install ADA van accessible space		General	1	$220.00	ea	$237.00	$242.93
								Total:	$262,933.00	$269,506.33
Priority	**Replacement Year**	**Sub Elements**	**Elements Description**	**Room Name**	**Room#**	**Quantity**	**Cost per Unit**	**Unit**	**Total Cost**	**Inflated Total Cost**
Priority 3										
	2009	Wall Finishes	Paint walls		General	75000	$0.65	sf	$52,601.00	$55,263.93
	2009	Domestic Water Supply Equipment	Replace water heater, commercial from 50 to 120 gal		General	1	$3,400.00	ea	$3,669.00	$3,854.74
	2010	Urinals	Replace urinals		General	8	$1,100.00	ea	$9,495.00	$10,225.08
	2010	Paving & Surfacing	Seal Coat asphalt		General	135100	$0.10	sf	$14,577.00	$15,697.83

	2010	Bath and Toilet Accessories	Replace restroom stalls		General	25	$707.00	ea	$19,071.00	$20,537.38
	2010	Lavatories	Replace lavatories		General	25	$885.00	ea	$23,873.00	$25,708.61
	2010	Water Closets	Replace water closet		General	27	$1,160.00	ea	$33,794.00	$36,392.44
	2010	Sprinklers	Fire pump		General	1	$25,000.00	ea	$26,975.00	$29,049.12
	2011	Floor Finishes	Replace linoleum		General	15000	$1.35	sf	$21,850.00	$24,118.31
	2011	Floor Finishes	Replace linoleum		General	15000	$1.35	sf	$21,850.00	$24,118.31
	2011	Passenger Elevators	Replace cab finishes		General	2	$2,500.00	ea	$5,395.00	$5,955.07
	2012	Fire Alarm Systems	Replace central panel		General	1	$7,500.00	ea	$8,093.00	$9,156.49
	2012	Domestic Water Supply Equipment	Replace water heater, residential		General	1	$200.00	ea	$216.00	$244.38
	2012	Suspended Ceilings	Replace acoustical tile ceiling		General	72000	$1.55	sf	$120,416.00	$136,239.65
								Total:	$361,875.00	$396,561.35
Priority	**Replacement Year**	**Sub Elements**	**Elements Description**	**Room Name**	**Room#**	**Quantity**	**Cost per Unit**	**Unit**	**Total Cost**	**Inflated Total Cost**
Priority 4										
	2014	Package Units	Replace roof top units		General	265	$1,200.00	ton	$343,122.00	$407,864.23
	2014	Package Units	Replace condensing unit/heat pumps		General	8	$920.00	ton	$7,941.00	$9,439.35
	2014	Wall Finishes	Paint walls		General	75000	$0.65	sf	$52,601.00	$62,526.06
	2014	Package Units	Replace makeup air unit		General	1	$15,000.00	ea	$16,185.00	$19,238.88
	2014	Passenger Elevators	Replace hydraulic elevator machinery and controls		General	2	$78,500.00	ea	$169,403.00	$201,366.93
	2015	Paving & Surfacing	Seal Coat asphalt		General	135100	$0.10	sf	$14,577.00	$17,760.66
	2015	Emergency Light & Power Systems	Replace UPS		General	1	$15,000.00	ea	$16,185.00	$19,719.85
	2015	Floor Finishes	Replace carpet		General	6111	$22.00	sy	$145,063.00	$176,745.18
	2015	Emergency Light & Power Systems	Replace diesel generator, 200 kW		General	1	$50,000.00	ea	$53,950.00	$65,732.84
	2016	Glazed Doors & Entrances	Fully glazed aluminum framed doors		General	3	$8,000.00	ea	$25,896.00	$32,340.56
	2016	Solid Exterior Doors	Replace solid entry door		General	4	$375.00	ea	$1,619.00	$2,021.91
								Total:	$846,542.00	$1,014,756.45
Priority	**Replacement Year**	**Sub Elements**	**Elements Description**	**Room Name**	**Room#**	**Quantity**	**Cost per Unit**	**Unit**	**Total Cost**	**Inflated Total Cost**
Priority 5										
	2018	Signage	ADA signage		General	2	$120.00	ea	$259.00	$339.83

	2019	Domestic Water Supply Equipment	Replace water heater, commercial from 50 to 120 gal		General	1	$3,400.00	ea	$3,669.00	$4,934.40
	2019	Wall Finishes	Paint walls		General	75000	$0.65	sf	$52,601.00	$70,742.50
	2020	Paving & Surfacing	Seal Coat asphalt		General	135100	$0.10	sf	$14,577.00	$20,094.56
	2022	Floor Finishes	Replace carpet		General	6111	$22.00	sy	$145,063.00	$210,094.48
	2022	Domestic Water Supply Equipment	Replace water heater, residential		General	1	$200.00	ea	$216.00	$312.83
	2023	Floor Finishes	Replace linoleum		General	15000	$1.35	sf	$21,850.00	$32,436.45
	2023	Floor Finishes	Replace linoleum		General	15000	$1.35	sf	$21,850.00	$32,436.45
	2024	Wall Finishes	Paint walls		General	75000	$0.65	sf	$52,601.00	$80,038.64
	2025	Paving & Surfacing	Seal Coat asphalt		General	135100	$0.10	sf	$14,577.00	$22,735.15
	2025	Bath and Toilet Accessories	Replace restroom stalls		General	25	$707.00	ea	$19,071.00	$29,744.25
	2026	Passenger Elevators	Replace cab finishes		General	2	$2,500.00	ea	$5,395.00	$8,624.72
	2027	Fire Alarm Systems	Replace central panel		General	1	$7,500.00	ea	$8,093.00	$13,261.32
								Total:	$359,822.00	$525,795.56

Report Subtotal: $1,832,467.00

Report Total: $2,207,914.69

TABLE OF CONTENTS

CERTIFICATION

EMG has completed a Comprehensive Facility Condition Assessment (FCA) of the subject property, Shenandoah Office Building, located at 102 Heritage Way, Leesburg, Virginia, the "Property".

The conclusions and recommendations presented in this report are based on the brief review of the plans and records made available to our Project Manager during the site visit, interviews of available property management personnel and maintenance contractors familiar with the Property, appropriate inquiry of municipal authorities, our Project Manager's walk-through observations during the site visit, and our experience with similar properties.

No testing, exploratory probing, dismantling or operating of equipment or in depth studies were performed unless specifically required under Section 2 of this report. This evaluation did not include engineering calculations to determine the adequacy of the Property's original design or existing systems. Although walk-through observations were performed, not all areas were observed (See Section 4.2 for areas observed). There may be defects in the Property, which were in areas not observed or readily accessible, may not have been visible, or were not disclosed by management personnel when questioned. The report describes property conditions at the time that the observations and research were conducted.

This report has been prepared on behalf of and exclusively for the use of the County of Loudoun, Virginia for the purpose stated within Section 2.0 of this report. The report, or any excerpt thereof, shall not be used by any party other than the County of Loudoun or for any other purpose than that specifically stated in our agreement or within Section 2.0 of this report without the express written consent of EMG.

Any reuse or distribution of this report without such consent shall be at the County of Loudoun and the recipient's sole risk, without liability to EMG.

Any questions regarding this report should be directed to Carlton Battle at ctbattle@emgcorp.com. or at (800) 733-0660, Extension 6652.

Prepared by: Darrin K. Holly
Project Manager

Reviewed by:

Carlton Battle
Program Manager

1. EXECUTIVE SUMMARY

1.1. PROPERTY INFORMATION AND GENERAL PHYSICAL CONDITION

The property information is summarized in the table below. More detailed descriptions may be found in the various sections of the report and in the Appendices.

Property Information	
Address:	102 Heritage Way, Leesburg, Virginia 20176
Year constructed:	1985
Current owner of property:	County of Loudoun, Virginia
Point of Contact:	Tom Trask, Contract Manager Department of General Services, Special Projects 703.737.8441 phone
Property type:	Office
Site area:	4.91 Acres
Gross floor area:	76,620 Square Feet
Number of buildings:	1
Number of stories:	3
Parking type and number of spaces:	386 spaces in open lots
Building construction:	Masonry bearing walls and metal-deck roof.
Roof construction:	Primary roofing - flat roof with built-up membrane. Secondary roofing – asphalt shingles.
Exterior Finishes:	Brick.
Heating and/or Air-conditioning:	Package rooftop units. Supplemental split system air conditioner units.
Fire and Life/Safety:	Fire sprinklers, hydrants, smoke detectors, alarms, extinguishers, pull stations.
Dates of visit:	August 22, 2006

Generally, the property appears to have been constructed within industry standards in force at the time of construction. The property appears to have been fairly well maintained in recent years and is in good to fair overall condition.

According to property management personnel, the property has had a somewhat limited capital improvement expenditure program over the past three years, primarily consisting of a new roof finish replacement. Supporting documentation was not provided in support of this claim but the work is evident.

1.2. Follow-Up Recommendations

Based on EMG's site observations and interviews with individuals familiar with the Property, additional follow-on studies are not recommended at this time.

1.3. Opinions of Probable Cost

The estimates for the repair and capital reserves items noted within this PCR are attached to the front of this report, following the cover page.

These estimates are based on invoices and/or bid documents provided by the Owner and/or facility, construction costs developed by construction resources such as *R.S. Means* and *Marshall & Swift*, EMG's experience with past costs for similar properties, city cost indexes, and assumptions regarding future economic conditions.

1.3.1. Methodology

Based upon our observations, research and judgment, along with consulting commonly accepted empirical Expected Useful Life (EUL) tables; EMG will render our opinion as to when a system or component will most probably necessitate replacement. Accurate historical replacement records provided by the facility manager are typically the best source for this data. Exposure to the weather elements, initial system quality and installation, extent of use, the quality and amount of preventive maintenance exercised are all factors that impact the effective age of a system or component. As a result, a system or component may have an effective age that is greater or less than its actual age. The Remaining Useful Life (RUL) of a component or system equals the EUL less its effective age.

In addition to determining the EUL and the RUL for each major prime system and building component, EMG will categorize each cited deficiency within one of the following four Priorities:

Priority 1: Currently Critical (Year 0)

Items in this category require immediate action and include corrective measures to:

- Return a building component to normal operation
- Stop accelerated deterioration
- Replace items that have reached or exceeded their useful service life
- Correct a cited safety hazard

Priority 2: Potentially Critical (Years 1-2)

Items in this category require action in the next 1-2 years and include corrective measures to:

- Return a building component to normal operation
- Stop rapid deterioration
- Correct potential life safety issues and/or code hazards
- Correct building components that are experiencing Intermittent operations

Priority 3: Necessary – Not Yet Critical (Years 3-5)

Items in this category require appropriate attention to preclude predictable deterioration, potential downtime, additional damage and higher costs to remediation if deferred further.

Priority 4: Recommended (Years 6-10)

Items in this category represent a sensible improvement to the existing conditions. These are not required for the most basic function of the facility; however, Priority 4 projects will improve overall usability and/or reduce long-term maintenance costs.

Priority 5: Does Not Meet Current Codes, but is "Grandfathered"

Items in this category do not require action at this time; however, substantial work performed in the future may require correction.

In addition to identifying and prioritizing all of the observed deficiencies, EMG will also provide the physical conditions of building components. The physical condition is typically defined as being in one of four categories: Good, Fair, Poor and Not Applicable. For the purposes of our assessments, the following definitions are used:

Good (G) =	Component or system is sound and performing its function. However, it may show signs of normal wear and tear, commensurate with its age, some minor remedial work may be required.
Fair (F) =	Component or system is performing adequately at this time but exhibits deferred maintenance, evidence of previous repairs, workmanship not in compliance with commonly accepted standards, is obsolete, or is approaching the end of its typical Expected Useful Life. Repair or replacement is required to prevent further deterioration, restore it to good condition, prevent premature failure, or to prolong its Expected Useful Life. Component or system exhibits an inherent deficiency of which the cost to remedy is not commensurate with the deficiency but is best remedied by a program of increased preventative maintenance or periodic repairs.
Poor (P) =	Component or system has either failed or cannot be relied upon to continue performing its original function as a result of: having realized or exceeded its typical expected useful life, excessive deferred maintenance, state of disrepair, an inherent design deficiency or workmanship. Present condition could contribute or cause the deterioration of contiguous elements or systems. Repair or replacement is required.
N/A =	Not Applicable

2. PURPOSE AND SCOPE

2.1. PURPOSE

The purpose of this report is to assist the Client in evaluating the physical aspects of this property and how its condition may affect the Client's financial decisions over time. For this Comprehensive Facility Condition Assessment, the major independent building components were observed and their physical conditions were evaluated in accordance with ASTM E2018-01. These components include the site and building exteriors and representative interior areas. The estimated cost for repairs and/or capital reserve items are included in the enclosed cost tables. All findings relating to these opinions of probable costs are included in the relevant narrative sections of this Report.

The property management staff and code enforcement agencies were interviewed for specific information relating to the physical property, code compliance, available maintenance procedures, available drawings, and other documentation.

2.2. DEVIATIONS FROM GUIDE (ASTM E2018-01)

ASTM E2018-01 requires that any deviations from the Guide be so stated within the report. EMG's probable cost threshold limitation is reduced from the Guide's $3,000 to $1,000, thus allowing for a more comprehensive assessment on smaller scale properties. Therefore, EMG's opinions of probable costs that are individually less than a threshold amount of $1,000 are typically omitted from this PCR. However, comments and estimated costs regarding identified deficiencies relating to life, safety or accessibility items are included regardless of this cost threshold.

In lieu of providing written record of communication forms, personnel interviewed from the facility and government agencies are identified in Section 2.3. Relevant information based on these interviews is included in Sections 2.3, 3.1, and other applicable report sections.

The assessment team will visit each identified property to evaluate the general condition of the building(s) and site improvements, review available construction documents in order to familiarize themselves with and be able to comment on the in-place construction systems, life safety, mechanical, electrical and plumbing systems, and the general built environment. The assessment team will conduct a walk-through survey of the building(s) in order to observe building systems and components, identify physical deficiencies and formulate recommendations to remedy the physical deficiencies.

- As a part of the walk-through survey, the assessment team will survey 100% of the facility's interior. In addition, EMG will survey the exterior of the properties including the building exterior, roofs, and sidewalk/pavement.
- The assessment team will interview the building maintenance staff so as to inquire about the subject property's historical repairs and replacements and their costs, level of preventive maintenance exercised, pending repairs and improvements, and frequency of repairs and replacements.
- The assessment team will develop opinions based on their site assessment, interviews with building maintenance staff, and interviews with relevant maintenance contractors, municipal authorities, and experience gained on similar properties previously evaluated. The assessment team may also question others who are knowledgeable of the subject property's physical condition and operation or knowledgeable of similar systems to gain comparative information to use in evaluation of the subject property.

- The assessment team may review documents and information provided by building maintenance staff that could also aid the knowledge of the subject property's physical improvements, extent and type of use, and/or assist in identifying material discrepancies between reported information and observed conditions.

2.3. PERSONNEL INTERVIEWED

The following personnel from the facility and government agencies were interviewed in the process of conducting the FCA:

Name and Title	Organization	Phone Number
Frank Baldridge Preventive Maintenance Tech	Loudoun County General Services Department	571.233.1848
Joe Decarlo Building Services Supervisor	Loudoun County General Services Department	703.771.5494

The FCA was performed with the assistance of Frank Baldridge, Preventive Maintenance Tech, the on site Point of Contact (POC), who was cooperative and provided information that appeared to be accurate based upon subsequent site observations. The on site contact is somewhat knowledgeable about the subject property and answered most questions posed during the interview process. The POC's management involvement at the property has been for the past 8-1/2 years.

2.4. DOCUMENTATION REVIEWED

Prior to the FCA, relevant documentation was requested that could aid in the knowledge of the subject property's physical improvements, extent and type of use, and/or assist in identifying material discrepancies between reported information and observed conditions. The review of submitted documents does not include comment on the accuracy of such documents or their preparation, methodology, or protocol.

The following list provides details on the documentation obtained by EMG during the FCA:

- Pre-Survey Questionnaire.

2.5. WEATHER CONDITIONS

August 22, 2006: Clear, with temperatures in the 80s (°F) and no winds.

3. CODE INFORMATION AND ACCESSIBILITY

3.1. ADA ACCESSIBILITY

Generally, Title II of the Americans with Disabilities Act (ADA) prohibits discrimination by entities to access and use of "areas of public accommodations" and "commercial facilities" on the basis of disability. Regardless of its age, these areas and facilities must be maintained and operated to comply with the Americans with Disabilities Act Accessibility Guidelines (ADAAG).

Buildings completed and occupied after January 26, 1992 are required to comply fully with the ADAAG. Existing facilities constructed prior to this date are held to the lesser standard of compliance to the extent allowed by structural feasibility and the financial resources available. As an alternative, a reasonable accommodation pertaining to the deficiency must be made.

During the FCA, a limited visual observation for ADA accessibility compliance was conducted. The scope of the visual observation was limited to those areas set forth in *EMG's Abbreviated Accessibility Checklist* provided in Appendix D of this report. It is understood by the Client that the limited observations described herein does not comprise a full ADA Compliance Survey, and that such a survey is beyond the scope of EMG's undertaking. Only a representative sample of areas was observed and, other than as shown on the Abbreviated Accessibility Checklist, actual measurements were not taken to verify compliance. The scope of the visual observation did not include any areas within tenant spaces.

At a public building property, the areas considered as a public accommodation besides the site itself and parking, are the exterior accessible route, the interior accessible route up to the tenant lease lines and the interior common areas, including the common area restrooms.

The facility does not appear to be accessible with Title III of the Americans with Disabilities Act. Elements as defined by the ADAAG that are not accessible as stated within the priorities of Title III, are as follows:

Parking

- Adequate number of designated parking stalls and signage for vans are not provided at the front entrance.

  Estimated Cost: 1 @ $220 each = ... $220
- Signage indicating accessible parking spaces for cars and vans are not provided adjacent to Sheriff's Office.

  Estimated Cost: 2 @ $120 each = ... $240

Ramps

- Existing exterior ramp is not equipped with the required handrails adjacent to Sheriff's Office.

  Estimated Cost: 17 ft. @ $40 LF = ... $680

A full ADA Compliance Survey may reveal additional aspects of the property that are not in compliance.

Corrections of these conditions should be addressed from a liability standpoint, but are not necessarily code violations. The Americans with Disabilities Act Accessibility Guidelines concern civil rights issues as they pertain to the disabled and are not a construction code, although many local jurisdictions have adopted the Guidelines as such. The cost to address the achievable items noted above is $1,140 and is included as a lump sum in the Deficiency Cost Table.

3.2. MOLD

EMG performed a limited visual assessment for the presence of mold, conditions conducive to mold, and evidence of moisture in readily accessible interior areas of the property. EMG did not note obvious visual indications of the presence of mold, conditions conducive to mold, or evidence of moisture in readily accessible interior areas of the property. No further action or investigation is recommended regarding mold at the property.

4. EXISTING BUILDING ASSESSMENT

4.1. TENANT UNIT TYPES

All 76,620 square feet of the building are occupied by a single tenant, Loudoun County Government, and used as office space for the Health Department, Family Services, and Sheriff's Office.

4.2. TENANT UNITS OBSERVED

EMG observed approximately 100 percent of the building in order to gain a clear understanding of the property's overall condition. Other areas accessed included the exterior of the property and the roofs.

All areas were available for observation during the site visit.

5. SITE IMPROVEMENTS

5.1. UTILITIES

The following table identifies the utility suppliers and the condition and adequacy of the services.

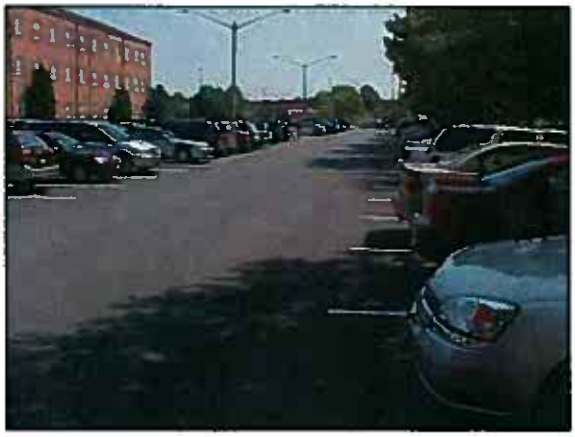
Site Utilities		
Utility	**Supplier**	**Condition & Adequacy**
Sanitary sewer	Town of Leesburg	Good
Storm sewer	Town of Leesburg	Good
Domestic water	Town of Leesburg	Good
Electric service	Dominion Virginia Power	Good
Natural gas service	Washington Gas	Good

Observations/Comments:

- The utilities appear to be adequate for the property. There are no unique, on site utility systems such as septic systems, water or waste water treatment plants, or propane gas tanks.
- See Section 7.4. for descriptions and comments regarding the emergency electrical generator.

5.2. PARKING, PAVING, AND SIDEWALKS

The main entrance drive is located along Heritage Way on the east side of the property. Additional entrance drives are located along the other adjacent public street. The paved surfaces are asphaltic concrete.



Based on a physical count, parking is provided for approximately 386 cars. The parking ratio is 5.0 spaces per thousand square feet of floor area. All of the parking stalls are located in open lots. There are nine handicapped-accessible parking stalls, one of which is reserved for vans.

The sidewalks throughout the property are constructed primarily of cast-in-place concrete, except at the front entrance where brick pavers are used.

The curbs and gutters are constructed of cast-in-place concrete.

Observations/Comments:

- The property does not have a dedicated paving repair and maintenance contractor. County maintenance personnel maintain the paving and flatwork or a contractor is retained when required.
- The asphalt pavement is in good to fair condition. However, there are several areas in the front parking lot showing signs of cracks and surface deterioration. These areas must be cut and patched immediately. The cost of this work is included in the Deficiency Cost Table.
- In order to maximize the pavement life, pothole patching, crack sealing, seal coating, and re-striping of the asphalt paving will be required during the assessment period. The cost of this work is included in the Deficiency Cost Table.
- The concrete curbs, gutters, and sidewalks throughout the property are in good condition. Routine cleaning and maintenance will be required during the assessment period.

5.3. DRAINAGE SYSTEMS AND EROSION CONTROL

Storm water from the roofs, landscaped areas, and paved areas flows into on site inlets and catch basins with underground piping connected to the municipal storm water management system.

Observations/Comments:

- There is no evidence of storm water runoff from adjacent properties. The storm water system appears to provide adequate runoff capacity. There is no evidence of major ponding or erosion.

5.4. TOPOGRAPHY AND LANDSCAPING

The property slopes gently down from the north side of the property to the south property line.

The landscaping consists of trees, shrubs, and grasses. Flower beds are located at the front entrance.

Surrounding properties include single- and multi-family housing, and retail developments.

Observations/Comments:

- The topography and adjacent uses do not appear to present conditions detrimental to the property.
- The landscape materials are in good condition and will require routine maintenance during the assessment period.

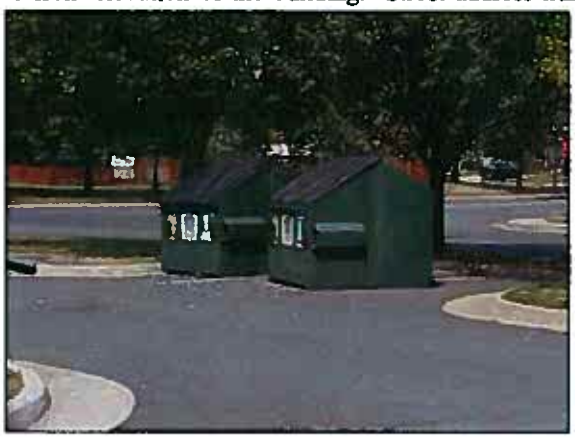
5.5. General Site Improvements

Property identification is provided by signage on the front elevation of the building. Street address numbers are displayed on the exterior elevations.

Site lighting is provided by metal street light standards. The light standards are spaced along the parking areas.

Exterior building illumination is provided by light fixtures surface-mounted on the exterior walls.

Dumpsters are located in the parking area and are placed on the asphalt paving. The dumpsters are not in enclosures.



Observations/Comments:

- The property identification signage is in good condition. Routine maintenance will be required during the assessment period.
- The exterior site and building light fixtures are in good condition. Routine maintenance will be required during the assessment period.
- The dumpsters are owned and maintained by the refuse contractor. No other action is required at this time.

6. BUILDING ARCHITECTURAL AND STRUCTURAL SYSTEMS

6.1. FOUNDATIONS

Based on structures of similar size, configuration, and geographic location, it is assumed that the foundation consists of a reinforced concrete slab-on-grade with integral perimeter footings, interior footings, and column pad footings bearing directly on the soil.

Observations/Comments:

- The foundation and footings could not be directly observed during the site visit. There is no evidence of movement that would indicate excessive settlement.

6.2. SUPERSTRUCTURE

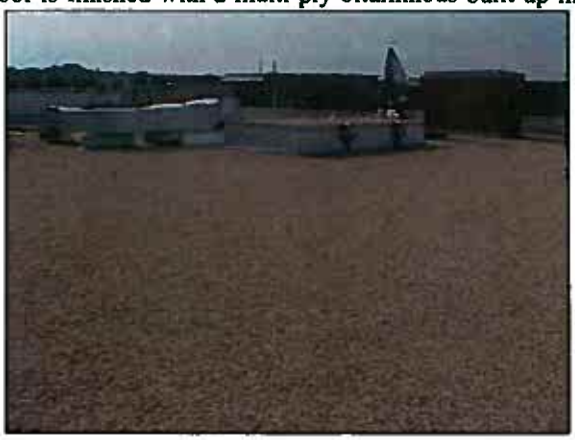
The building has concrete masonry unit (CMU) exterior and interior bearing walls with interior steel columns, which support the upper floors and roof diaphragms. The upper floors have concrete-topped metal decks and are supported by steel beams and open-web steel joists. The roof is constructed of metal decking, which is supported by steel beams and open web steel joists.

Observations/Comments:

- The superstructure is exposed in some locations, which allows for limited observation. Walls and floors appear to be plumb, level, and stable. There are no significant signs of deflection or movement.

6.3. ROOFING

The primary roof is classified as a flat roof. The roof is finished with a multi-ply bituminous built-up membrane. The roof is topped with stone ballast.



The exterior perimeter walls extend above the surface of the roof, creating parapet walls. The roof membrane terminates along a flashed cant strip at the base of the parapet walls. The roof has built-up base and edge flashing.

Storm water is drained from the roof by internal drains.

The secondary roofs, located on the north and south ends of the building, are classified as gabled roofs. The roofs are finished with asphalt shingles over asphalt-saturated paper.

The secondary roofs drain over the eaves to sheet metal gutters and downspouts, which are connected by underground piping to the storm drainage system.

Observations/Comments:

- The property does not have a dedicated roof repair and maintenance contractor. County maintenance personnel maintain the roofs or a contractor is retained when required.
- The roof finishes are approximately one year old. Information regarding roof warranties or bonds were requested but are not available.
- There is no evidence of active roof leaks.
- The roof membranes are in good condition and will require routine maintenance during the assessment period.
- The roof shingles are in good condition and will require routine maintenance during the assessment period.
- There is no evidence of roof deck or insulation deterioration. The roof substrate and insulation should be inspected during any future roof repair or replacement work.
- There is no evidence of fire retardant treated plywood (FRT).
- The roof flashings are in good condition and will require routine maintenance during the assessment period.
- The parapet walls and copings are in good condition and will require routine maintenance during the assessment period.
- Roof drainage appears to be adequate. Clearing and minor repair of drain system components should be performed regularly as part of the property management's routine maintenance program.
- The roof vents are in good condition and will require routine maintenance during the assessment period.
- During severe wind storms, roofing aggregate (ballast) may become wind-borne and may harm nearby persons or may damage surrounding properties or building or site elements of the subject property. National, regional, and local building codes vary widely in the treatment of this issue and should be consulted during any future roofing repairs or replacements.

6.4. EXTERIOR WALLS

The exterior walls are finished with brick masonry veneer on concrete masonry unit (CMU) walls.

Building sealants (caulking) are located between dissimilar materials, at joints, and around window and door openings.

Observations/Comments:

- The exterior finishes are in good condition and will require routine maintenance during the evaluation period.
- The sealant is flexible, smooth, and in good condition and will require routine maintenance during the assessment period.

6.5. EXTERIOR AND INTERIOR STAIRS

The interior stairs are constructed of steel and have closed risers and concrete-filled steel pan treads. The handrails and balusters are constructed of metal.

The exterior stairs are constructed of reinforced concrete. The handrails and balusters are constructed of metal.

Observations/Comments:

- The exterior and interior stairs, balusters, and handrails are in good condition and will require routine maintenance during the assessment period.

6.6. EXTERIOR WINDOWS AND DOORS

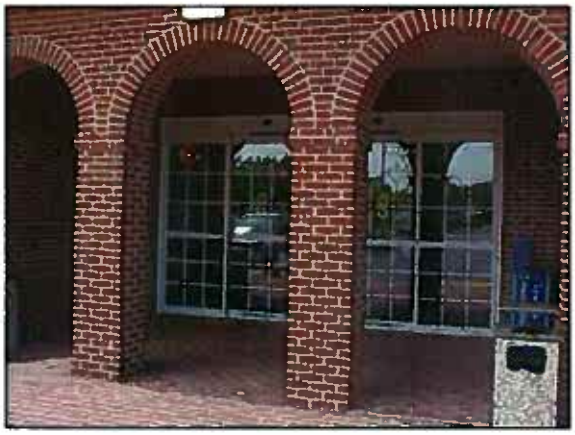
The entrance doors are fully glazed aluminum-framed doors set in the metal framing system.

The windows are wood-framed, double-glazed, double-hung units.

The service doors are painted metal doors set in metal frames. The doors have cylindrical locksets with lever handle hardware.

There is one overhead door located at the loading dock area. The overhead door is a flush-paneled metal door and is equipped with an automatic opener.

The loading dock is equipped with bumpers.



Observations/Comments:

- The aluminum framed entrance doors are in good condition. Based on their estimated Remaining Useful Life (RUL), the doors will require replacement during the evaluation period. The estimated cost of this work is included in the Deficiency Cost Table.
- The windows are in fair condition. There is isolated evidence of leaks around some of the windows. Based on the estimated Remaining Useful Life (RUL) and current conditions, the windows will require replacement during the evaluation period. The estimated cost of this work is included in the Deficiency Cost Table.
- The service doors and door hardware are in good to fair condition. Based on their estimated Remaining Useful Life (RUL), the service doors will require replacement during the evaluation period. The estimated cost of this work is included in the Deficiency Cost Table.
- The overhead door is in good to fair condition, and will require routine maintenance during the evaluation period.
- The dock equipment is in good condition and will require routine maintenance during the assessment period.

6.7. PATIO, TERRACE, AND BALCONY

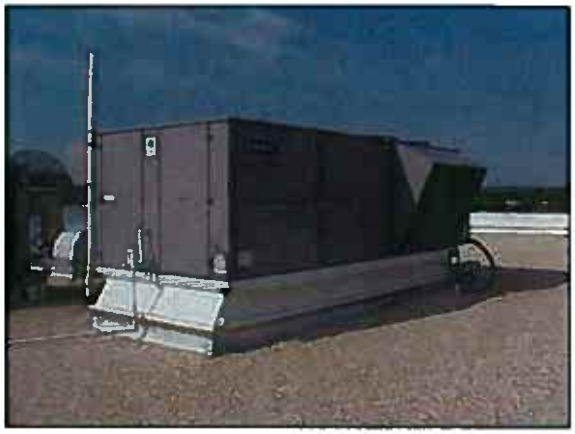
Not applicable. There are no patios, terraces, or balconies.

6.8. COMMON AREAS, ENTRANCES, AND CORRIDORS

Not applicable. There are no interior common areas.

7. BUILDING MECHANICAL AND PLUMBING SYSTEMS

7.1. BUILDING HEATING, VENTILATING, AND AIR-CONDITIONING (HVAC)



Heating and cooling are provided in the common areas by individual direct expansion, constant volume electric package rooftop units. There are a total of five package units and one make-up unit. The cooling equipment uses R-22 as a refrigerant.

Air distribution is provided to supply air registers by ducts concealed above the ceilings. Return air grilles are located in each space. The heating and cooling system are controlled by local thermostats.

Supplemental cooling and heating in selected areas such as computer and server rooms, elevator equipment room, and Sheriff's Office are provided by split-system, air conditioners with electric heat. The fan coil units are located in either the corner of the computer rooms, mechanical closets, or above the ceiling tiles. The four condensing units are pad-mounted on grade. The cooling equipment uses R-22 as a refrigerant.

Air distribution is provided to supply air registers by ducts concealed above the ceilings. Return air grilles are located adjacent to the fan coil units. The cooling systems are controlled by local thermostats.

The stair wells, bathrooms, and other areas are ventilated by mechanical exhaust fans. Large capacity ventilation fans are mounted on the roof and are connected by concealed ducts to each ventilated space.

Observations/Comments:

- The property does not have a dedicated HVAC repair and maintenance contractor. County maintenance personnel maintain the HVAC equipment or a contractor is retained when required.
- Records of the installation, maintenance, upgrades, and replacement of the HVAC equipment have been maintained since the property was first occupied.
- The HVAC equipment varies in age. HVAC equipment is reportedly replaced on an "as-needed" basis.
- The rooftop units appear to be in good to fair condition. Based on their estimated Remaining Useful Life (RUL), the rooftop units will require replacement during the assessment period. The cost of this work is included in the Deficiency Cost Table.
- The makeup air unit appears to be in good to fair condition. Based on its estimated Remaining Useful Life (RUL), the makeup air unit will require replacement during the assessment period. The cost of this work is included in the Deficiency Cost Table.
- The condensers appear to be in good condition. Based on their estimated Remaining Useful Life (RUL), the units will require replacement during the assessment period. The cost of this work is included in the Deficiency Cost Table.

- The mechanical ventilation system and equipment appear to be in good condition and will require routine maintenance during the assessment period. Equipment or component replacements can be performed as part of the property management's routine maintenance program.

7.2. BUILDING PLUMBING AND DOMESTIC HOT WATER

The plumbing systems include the incoming water service, the cold water piping system, and the sanitary sewer and vent system. The risers and the horizontal distribution piping are copper. The soil and vent systems are PVC.

The water meter is located in a vault adjacent to the public street.

Domestic hot water is supplied by three electric water heaters. The water heaters have capacities of 120, 40 and 20 gallons, respectively.

The restrooms have commercial-grade fixtures and accessories including water closets and lavatories.

Observations/Comments:

- The plumbing systems appear to be well maintained and in good condition. The water pressure appears to be adequate. The plumbing systems will require routine maintenance during the assessment period.
- There is no evidence that the property uses polybutylene piping for the domestic water distribution system.
- The pressure and quantity of hot water appear to be adequate.
- The water heaters appear to be in good to fair condition. Based on their estimated Remaining Useful Life (RUL), some of the water heaters will require replacement during the assessment period. The cost of this work is included in the Deficiency Cost Table.
- The accessories and fixtures in the restrooms are in good to fair condition. Based on their estimated Remaining Useful Life (RUL), some of the fixtures will require replacement during the assessment period. The cost of this work is included in the Deficiency Cost Table.

7.3. BUILDING GAS DISTRIBUTION

Not applicable. The property is not supplied with natural gas.

7.4. BUILDING ELECTRICAL

The electrical supply lines run underground to a pad-mounted transformer, which feeds interior-mounted electrical meters.

The main electrical service size is 2,000 amps, 277/480 volt, three-phase, four-wire, altemating current (AC). Step down transformers are located in the electrical spaces. The electrical wiring is copper, installed in metallic conduit. Circuit breaker panels are located throughout the building.

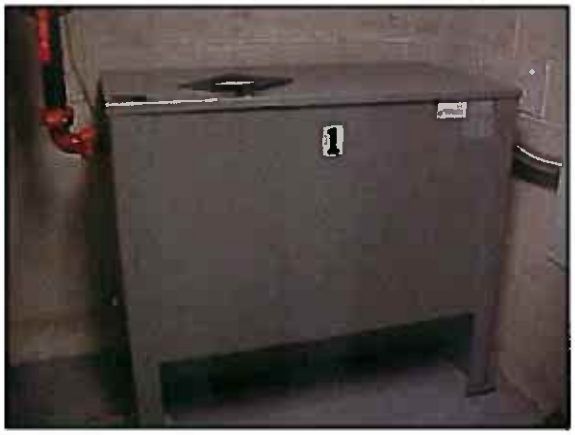
A diesel-powered, 200 kW emergency electrical generator is located in the rear of the building. The generator provides back-up power for elements of the fire and life safety systems. The 600-gallon fuel tank is an above-ground tank located adjacent to the generator. In addition, the building has a UPS system.

Observations/Comments:

- The on site electrical systems up to the meters are owned and maintained by the respective utility company.
- The electrical service and capacity appear to be adequate for the property's demands.
- The switchgear, circuit breaker panels, and electrical meters appear to be in good to fair condition and will require routine maintenance during the assessment period.
- The generator is in good condition and is reportedly tested on a weekly basis. Based on its estimated Remaining Useful Life (RUL), the generator will require replacement during the assessment period. The cost of this work is included in the Deficiency Cost Table.
- The UPS is in good to fair condition. Based on its estimated Remaining Useful Life (RUL), the UPS will require replacement during the assessment period. The cost of this work is included in the Deficiency Cost Table.

7.5. BUILDING ELEVATORS AND CONVEYING SYSTEMS

There are two hydraulic passenger elevators. Each elevator has a rated capacity of 2,500 pounds and a speed of 125 fpm. The elevator machinery is located in a room adjacent to the shaft.

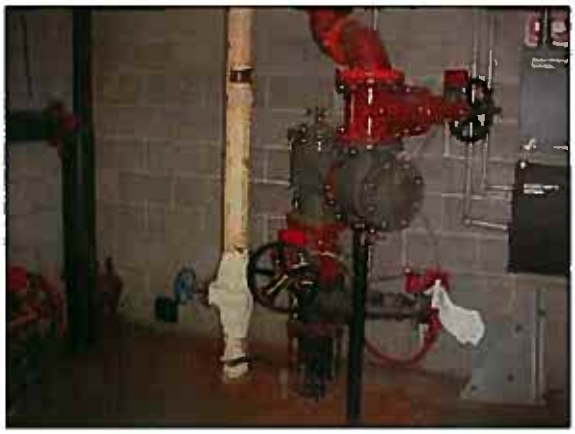


Each elevator cab has carpeted floors, plastic-laminated wood wall panels, and surface-mounted light fixtures. The doors are fitted with electronic safety stops. Emergency communication equipment is provided in each cab.

Observations/Comments:

- The elevators are serviced by Landmark Elevator on a routine basis. The elevator machinery and controls are the originally installed system.
- The elevators appear to be in good to fair condition and provide adequate service. Based on their estimated Remaining Useful Life (RUL), some of the elevator equipment and controls will require replacement during the assessment period. The cost of this work is included in the Deficiency Cost Table.
- The elevators are inspected on an annual basis by the municipality, and a certificate of inspection is displayed in the elevator cabs.
- The emergency communication equipment in the elevators appears to be functional and will require routine maintenance during the assessment period.
- The finishes in the elevator cabs appear to be in good to fair condition. Based on their estimated Remaining Useful Life (RUL), some of the cab finishes will require replacement during the assessment period. The cost of this work is included in the Deficiency Cost Table.

7.6. Fire Protection and Security Systems



The fire protection system consists of a wet-pipe sprinkler system, a wet standpipe with fire department connections in the stairway, portable fire extinguishers, smoke detectors, pull stations, and alarm horns. Siamese connections are located on the exterior of the building. The nearest fire hydrants are located in the parking areas and are approximately 100 feet from the building.

Interior areas and corridors are equipped with battery back-up exit lights, illuminated exit signs, pull stations, alarm horns, and strobe light alarms.

Fire sprinkler risers are located in a fire protection equipment room. The system is equipped with a fire pump rated at 750 GPM. The system is also equipped with a back flow preventer.

A central fire alarm panel is located in the main electrical room and monitors the pull stations, smoke detectors, and flow switches. The alarm panel also sounds the alarm and automatically notifies the monitoring service or the fire department in the event of trouble.

Interior fire exit stairwells are accessed from the common area corridors. The walls of the fire stairwells are exposed masonry. The stairs discharge at the ground floor, to the main entrance lobby.

Observations/Comments:

- The fire sprinklers appear to be in good condition and are inspected by a qualified contractor on a routine basis. The fire sprinklers will require routine maintenance during the assessment period.
- The fire extinguishers are serviced annually and appear to be in good condition. The fire extinguishers were serviced and inspected within the last year.
- The pull stations and alarm horns appear to be in good condition and will require routine maintenance during the assessment period.
- Smoke detector replacement is considered to be routine maintenance.
- Exit sign and emergency light replacement is considered to be routine maintenance.
- The central alarm panel appears to be in good condition and is serviced regularly by a qualified fire equipment contractor. Equipment testing is not within the scope of a Property Condition Assessment. Based on its estimated Remaining Useful Life (RUL), the central alarm panel will require replacement during the assessment period. The cost of this work is included in the Deficiency Cost Table.
- The fire pump appears to be original and in fair condition. Based on its estimated Remaining Useful Life (RUL), the fire pump will require replacement during the assessment period. The cost of this work is included in the Deficiency Cost Table.
- The exit stairwells appear to be constructed in accordance with applicable codes in force at the time of construction.
- The stairwell doors and door hardware are fire-rated. Components bearing certification labels are displayed on the doors.

8. TENANT SPACES

8.1. INTERIOR FINISHES

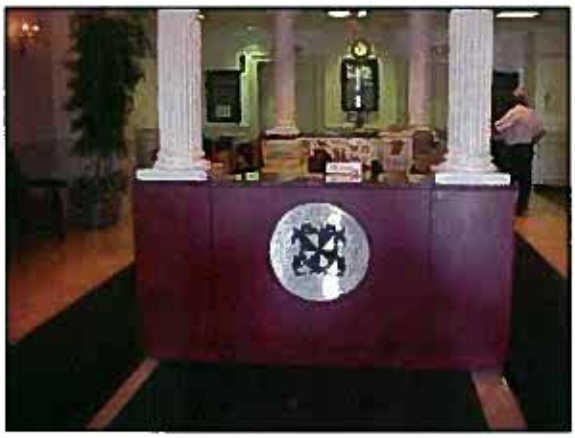
The lobby contains an information desk, public restrooms, fire alarm pull stations and horns, fire alarm annunciator, and exit signs. Elevators, corridors, and stairways are accessed directly from the lobby.

Different departments are accessed from corridors beyond the lobby and from corridors on each floor. Common area restrooms are located on each floor.

The following table identifies the interior areas and generally describes the finishes in each area.

Common Area	Floors	Walls	Ceilings
Lobby	Ceramic tile	Painted drywall	Painted drywall
Corridor	Carpet	Painted drywall	Suspend T-Bar with acoustic tiles
Restroom	Ceramic tile	Ceramic tile	Suspend T-Bar with acoustic tiles
Offices	Carpet / Linoleum	Painted drywall	Suspended T-bar system with acoustical tiles
Conference / Meeting Rooms	Carpet	Painted drywall	Suspended T-bar system with acoustical tiles

The interior doors are painted metal doors set in metal frames. The interior doors have cylindrical locksets with lever handle hardware.



Observations/Comments:

- It appears that the interior finishes have not been renovated within the last seven years.
- The interior finishes are in good to fair condition. Based on their estimated Remaining Useful Life (RUL), some of the flooring will require replacement during the assessment period. The cost of this work is included in the Deficiency Cost Table.
- Interior painting will also be required during the assessment period. The cost of this work is also included in the Deficiency Cost Table.
- Based on their estimated Remaining Useful Life (RUL), the ceiling tiles will require replacement during the assessment period. The cost of this work is included in the Deficiency Cost Table.

- The interior doors and door hardware are in good condition and will require routine maintenance during the assessment period.

8.2. COMMERCIAL KITCHEN EQUIPMENT

Not applicable. There are no commercial kitchens at the property.

8.3. HVAC

See Section 7.1 for a complete description and comments on the building's HVAC systems.

8.4. PLUMBING

See Section 7.2 for a complete description and comments on the building's plumbing systems.

9. OTHER STRUCTURES

Not applicable. There are no major accessory structures.

10. APPENDICES

APPENDIX A: Photographic Record
APPENDIX B: Site Plan
APPENDIX C: Supporting Documentation
APPENDIX D: EMG Abbreviated Accessibility Checklist
APPENDIX E: Terminology
APPENDIX F: Resumes for Report Reviewer and Field Observer

APPENDIX A:
PHOTOGRAPHIC RECORD

EMG DUE DILIGENCE FOR THE LIFE CYCLE OF REAL ESTATE

EMG PHOTOGRAPHIC RECORD

Project No.: 79334.06R-002.138 **Project Name: Shenandoah Office Building**

Photo #1:	Front elevation of building

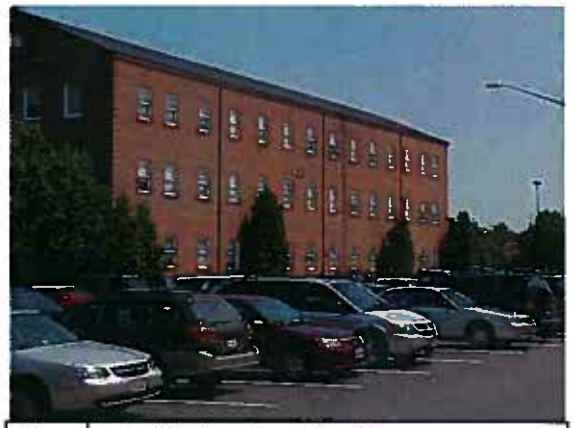


Photo #2:	Left side elevation of building

Photo #3:	Right side elevation of building

Photo #4:	Rear elevation of building

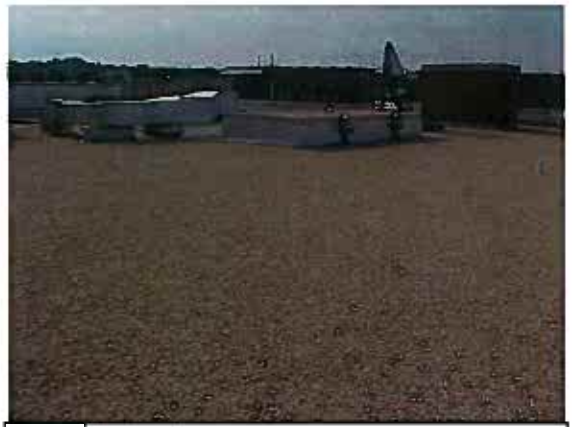


Photo #5:	Flat roof overview

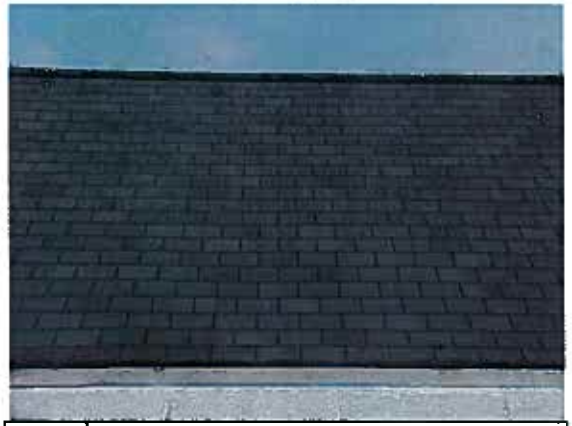


Photo #6:	Asphalt shingle roofing

EMG DUE DILIGENCE FOR THE LIFE CYCLE OF REAL ESTATE

EMG PHOTOGRAPHIC RECORD

Project No.: 79334.06R-002.138 **Project Name: Shenandoah Office Building**

Photo #7:	Asphalt parking lot overview

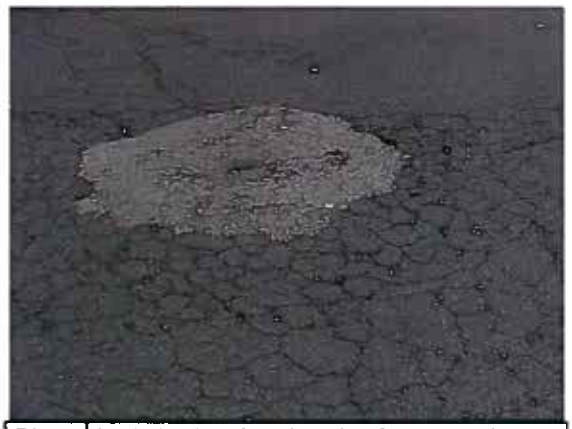


Photo #8:	Asphalt deterioration in front parking lot area

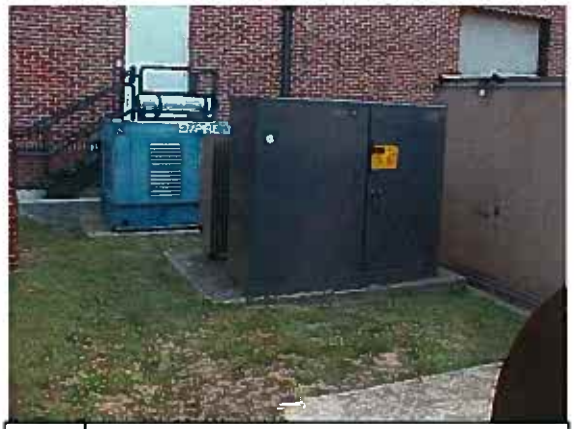


Photo #9:	Pad-mounted transformer

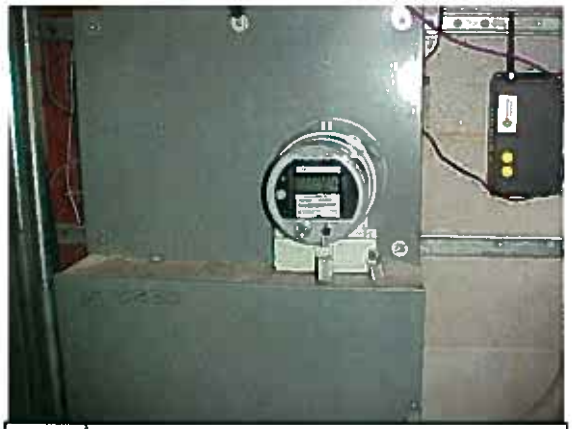


Photo #10:	Interior-mounted electric meter

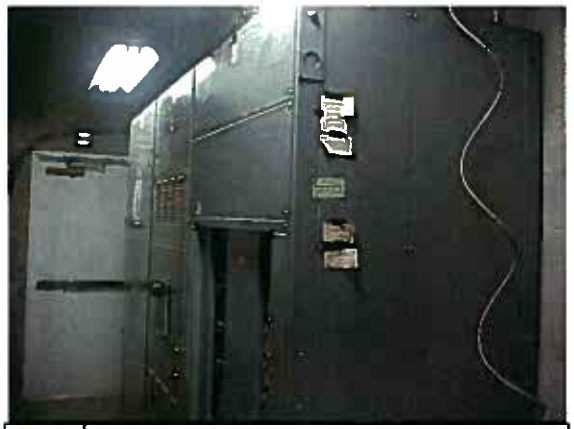


Photo #11:	Switchgear equipment

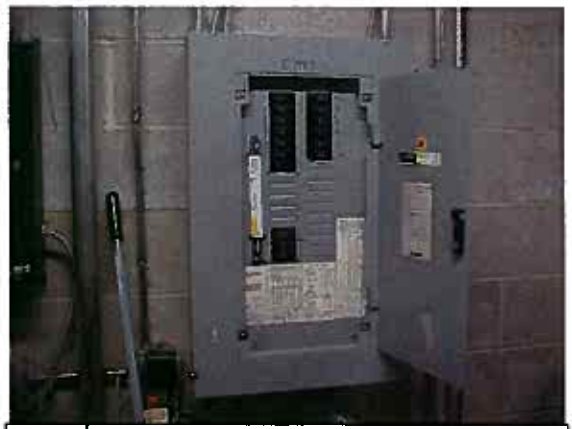


Photo #12:	Typical circuit breaker panel

EMG DUE DILIGENCE FOR THE LIFE CYCLE OF REAL ESTATE

EMG PHOTOGRAPHIC RECORD

Project No.: 79334.06R-002.138 **Project Name: Shenandoah Office Building**

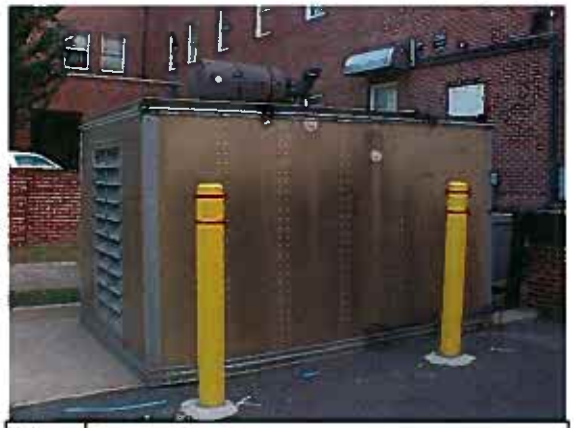


Photo #13:	Emergency generator

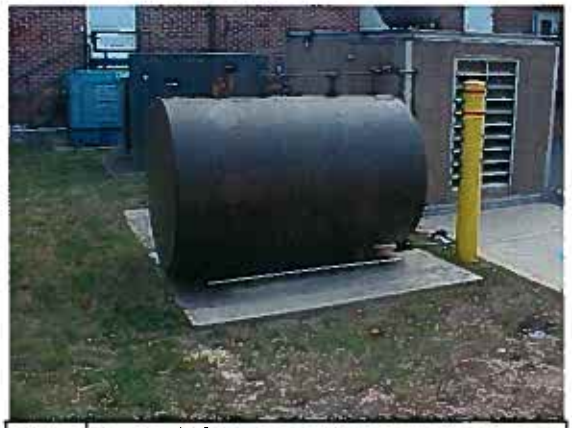


Photo #14:	Fuel tank for emergency generator

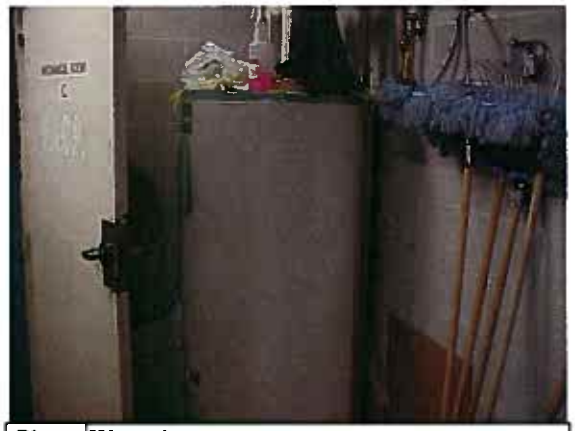


Photo #15:	Water heater

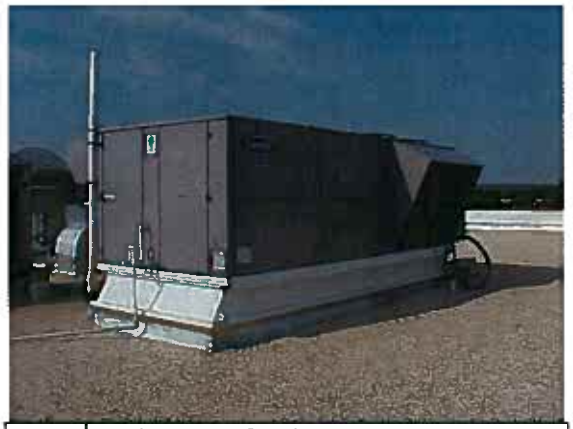


Photo #16:	Rooftop HVAC unit

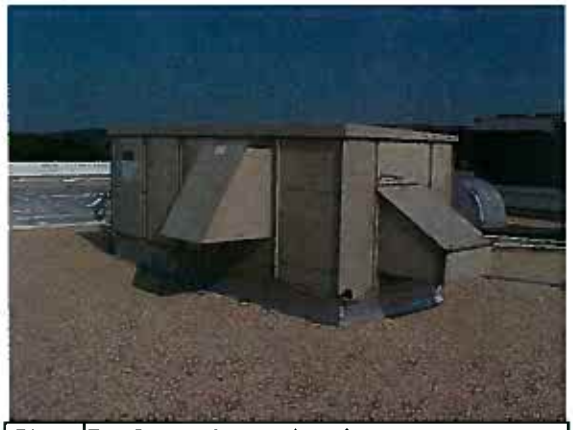


Photo #17:	Rooftop make-up air unit

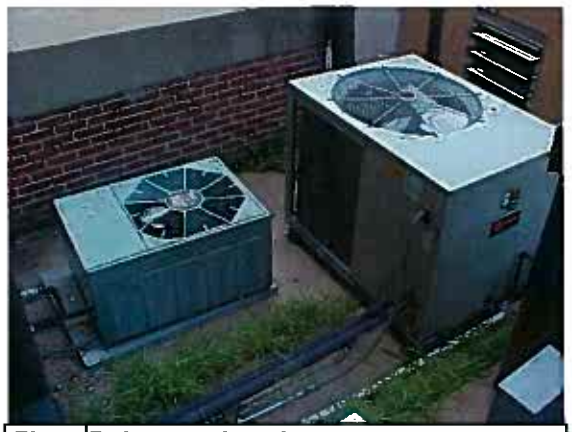


Photo #18:	Pad-mounted condensers

EMG DUE DILIGENCE FOR THE LIFE CYCLE OF REAL ESTATE

EMG PHOTOGRAPHIC RECORD

Project No.: 79334.06R-002.138 **Project Name: Shenandoah Office Building**

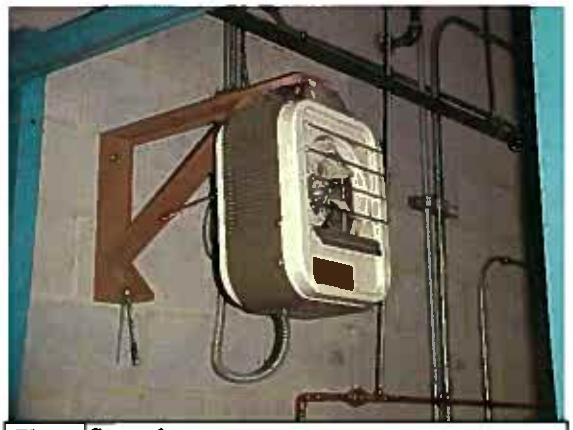


Photo #19:	Space heater

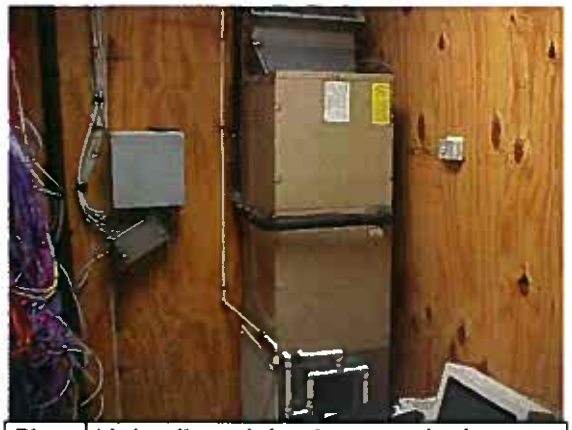


Photo #20:	Air handler unit in telecommunication room

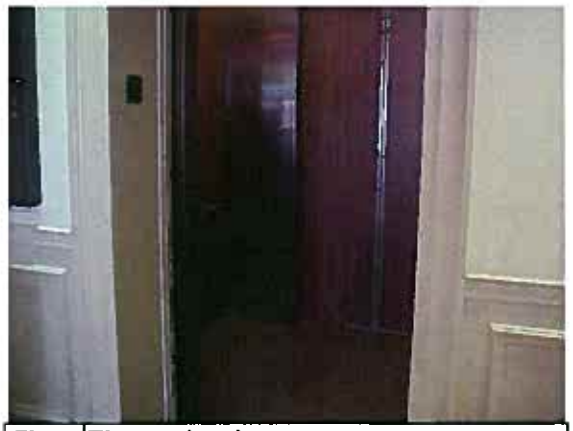


Photo #21:	Elevator interior

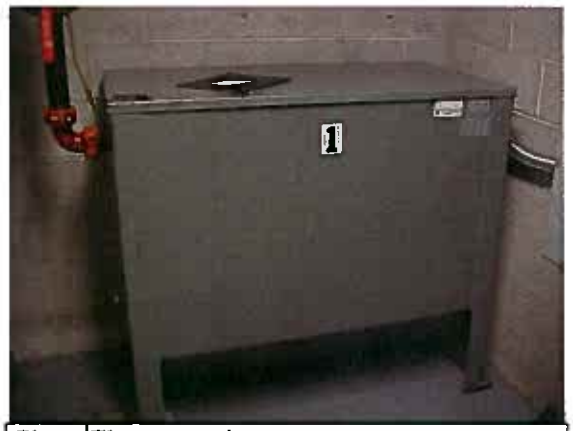


Photo #22:	Elevator equipment

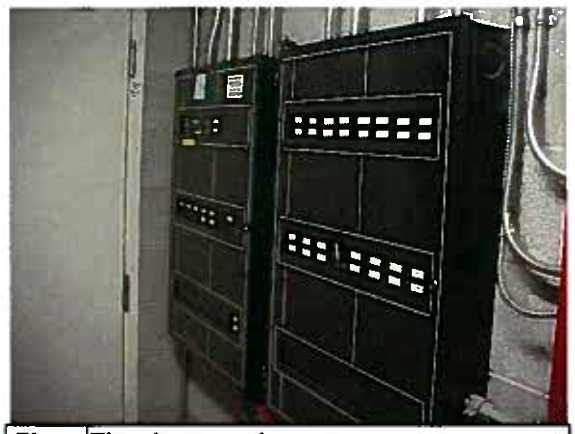


Photo #23:	Fire alarm panel

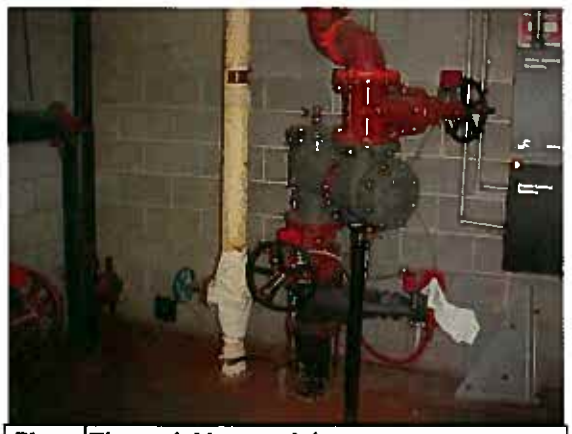


Photo #24:	Fire sprinkler standpipe

EMG DUE DILIGENCE FOR THE LIFE CYCLE OF REAL ESTATE

EMG PHOTOGRAPHIC RECORD

Project No.: 79334.06R-002.138 **Project Name: Shenandoah Office Building**

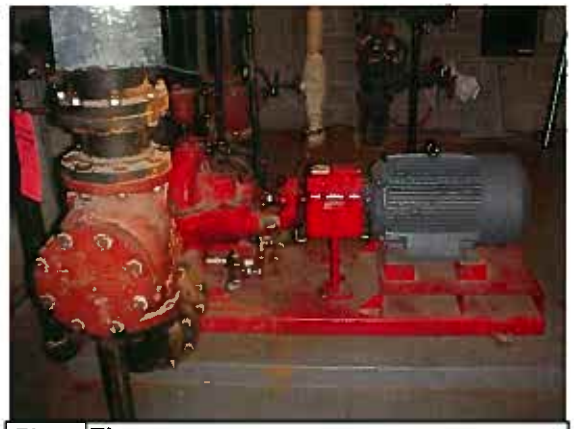


Photo #25:	Fire pump

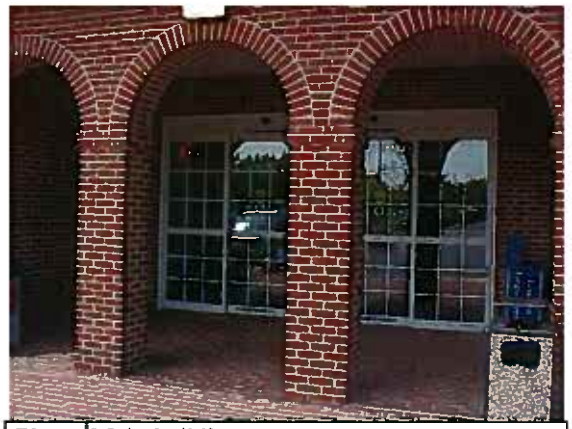


Photo #26:	Main building entrance

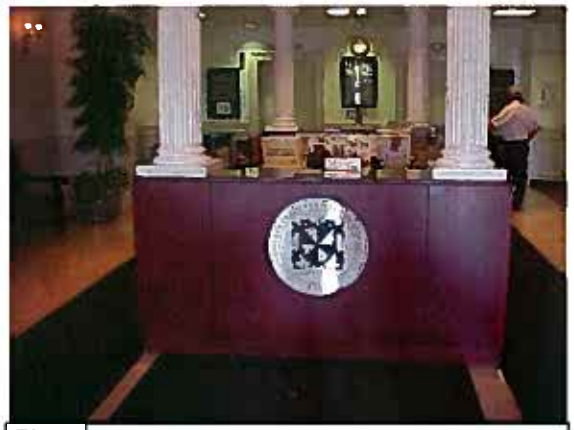


Photo #27:	Front desk

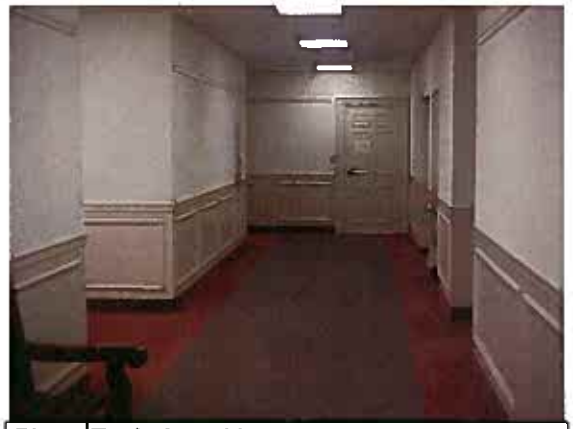


Photo #28:	Typical corridor

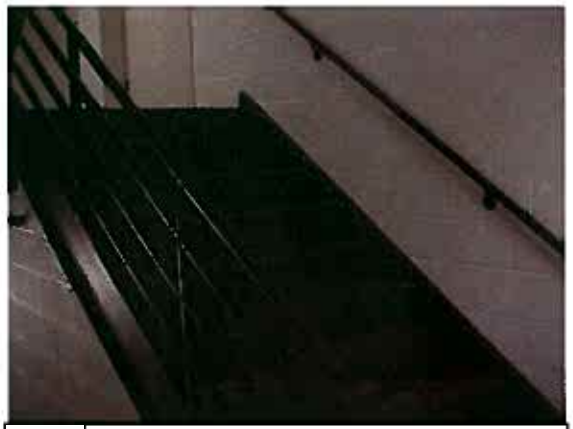


Photo #29:	Interior stairs

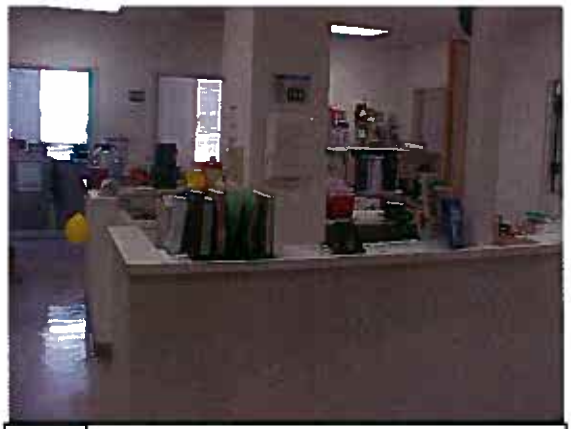


Photo #30:	Office space

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EMG PHOTOGRAPHIC RECORD

Project No.: 79334.06R-002.138 **Project Name: Shenandoah Office Building**

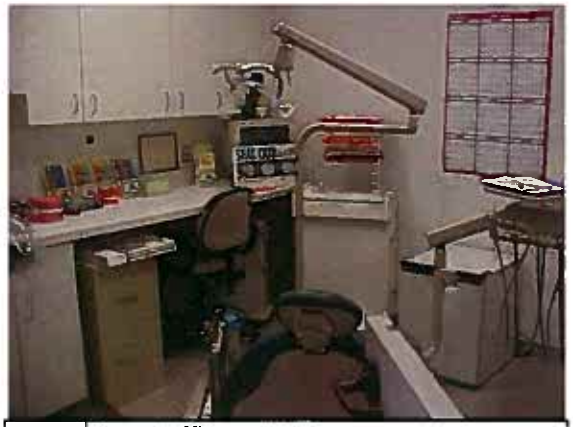

Photo #31:	Dental office

Photo #32:	Office space

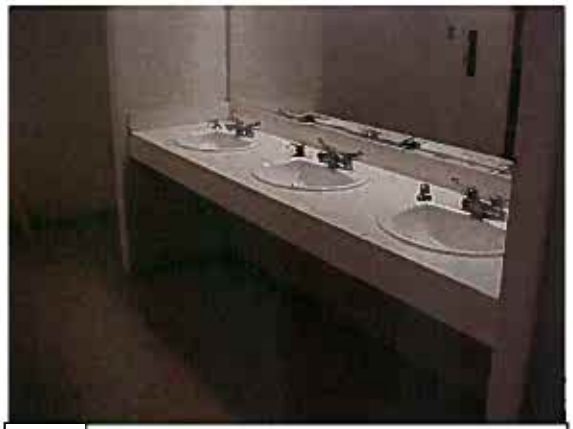

Photo #33:	Restroom

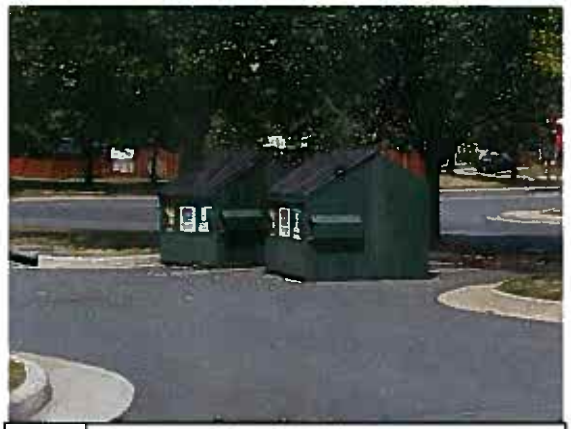

Photo #34:	Dumpsters

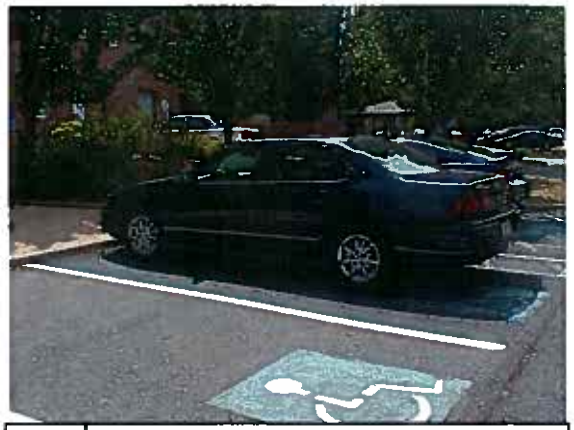

Photo #35:	Missing ADA parking signage

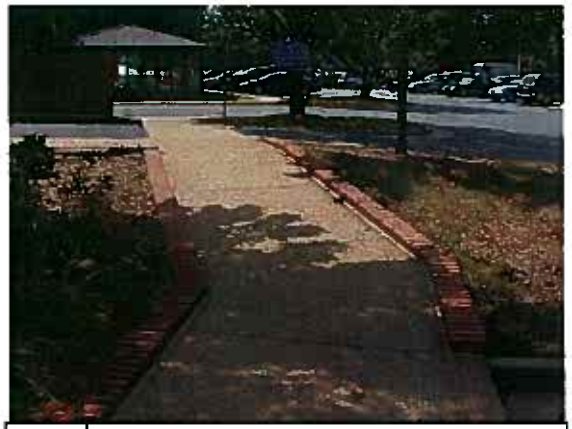

Photo #36:	Missing ADA ramp/railings

APPENDIX B:
SITE PLAN

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APPENDIX C:
SUPPORTING DOCUMENTATION

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APPENDIX D:
EMG ABBREVIATED ACCESSIBILITY CHECKLIST

Property Name: Shenandoah Office Building
Date: August 22, 2006
Project Number: 79334.06R-002.138

EMG Abbreviated Accessibility Checklist					
	Building History	**Yes**	**No**	**N/A**	**Comments**
1.	Has the management previously completed an ADA review?	☐			
2.	Have any ADA improvements been made to the property?	☐			
3.	Does a Barrier Removal Plan exist for the property?	☐			
4.	Has the Barrier Removal Plan been reviewed/approved by an arms-length third party such as an engineering firm, architectural firm, building department, other agencies, etc.?				Unknown
5.	Has building ownership or management received any ADA related complaints that have not been resolved?		☐		
6.	Is any litigation pending related to ADA issues?		☐		
	Parking	**Yes**	**No**	**N/A**	**Comments**
1.	Are there a sufficient parking spaces with respect to the total number of reported spaces?	☐			
2.	Are there sufficient van-accessible parking spaces available (96" wide/ 96" aisle for van)?		☐		One space needed at the main building entrance
3.	Are accessible spaces marked with the International Symbol of Accessibility? Are there signs reading "Van Accessible" at van spaces?	☐			
4.	Is there at least one accessible route provided within the boundary of the site from public transportation stops, accessible parking spaces, passenger loading zones, if provided, and public streets and sidewalks?	☐			
5.	Do curbs on the accessible route have depressed, ramped curb cuts at drives, paths, and drop-offs?	☐			
6.	Does signage exist directing you to accessible parking and an accessible building entrance?		☐		Two signs for accessible parking are missing in front of the Sheriff's Office
	Ramps	**Yes**	**No**	**N/A**	**Comments**
1.	If there is a ramp from parking to an accessible building entrance, does it meet slope requirements? (1:12)	☐			

EMG Abbreviated Accessibility Checklist					
2.	Are ramps longer than 6 ft complete with railings on both sides?		☐		Railings are missing on ramp adjacent to Sheriff's office.
3.	Is the width between railings at least 36 inches?			☐	
4.	Is there a level landing for every 30 ft horizontal length of ramp, at the top and at a the bottom of ramps and switchbacks?			☐	
	Entrances/Exits	**Yes**	**No**	**N/A**	**Comments**
1.	Is the main accessible entrance doorway at least 32 inches wide?	☐			
2.	If the main entrance is inaccessible, are there alternate accessible entrances?			☐	
3.	Can the alternate accessible entrance be used independently?			☐	
4.	Is the door hardware easy to operate (lever/push type hardware, no twisting required, and not higher than 48 inches above the floor)?	☐			
5.	Are main entry doors other than revolving door available?	☐			
6.	If there are two main doors in series, is the minimum space between the doors 48 inches plus the width of any door swinging into the space?			☐	
	Paths of Travel	**Yes**	**No**	**N/A**	**Comments**
1.	Is the main path of travel free of obstruction and wide enough for a wheelchair (at least 36 inches wide)?	☐			
2.	Does a visual scan of the main path reveal any obstacles (phones, fountains, etc.) that protrude no more than 4 inches into walkways or corridors?	☐			
3.	Are floor surfaces firm, stable, and slip resistant (carpets wheelchair friendly)?	☐			
4.	Is at least one wheelchair-accessible public telephone available?	☐			
5.	Are wheelchair-accessible facilities (toilet rooms, exits, etc.) identified with signage?	☐			
6.	Is there a path of travel that does not require the use of stairs?	☐			
7.	If audible fire alarms are present, are visual alarms (strobe light alarms) also installed in all common areas?	☐			
	Elevators	**Yes**	**No**	**N/A**	**Comments**
1.	Do the call buttons have visual signals to indicate when a call is registered and answered?	☐			

EMG Abbreviated Accessibility Checklist					
2.	Is the "UP" button above the "DOWN" button?	☐			
3.	Are there visual and audible signals inside cars indicating floor change?	☐			
4.	Are there standard raised and Braille marking on both jambs of each host way entrance?	☐			
5.	Do elevator doors have a reopening device that will stop and reopen a car door if an object or a person obstructs the door?	☐			
6.	Do elevator lobbies have visual and audible indicators of car arrival?	☐			
7	Does the elevator interior provide sufficient wheelchair turning area (51" x 68")?	☐			
8.	Are elevator controls low enough to be reached from a wheelchair (48 inches front approach/54 inches side approach)?	☐			
9.	Are elevator control buttons designated by Braille and by raised standard alphabet characters (mounted to the left of the button)?	☐			
10.	If a two-way emergency communication system is provided within the elevator cab, is it usable without voice communication?	☐			
	Restrooms	**Yes**	**No**	**N/A**	**Comments**
1.	Are common area public restrooms located on an accessible route?	☐			
2.	Are pull handles push/pull or lever type?	☐			
3.	Are there audible and visual fire alarm devices in the toilet rooms?	☐			
4.	Are corridor access doors wheelchair-accessible (at least 32 inches wide)?	☐			
5.	Are public restrooms large enough to accommodate a wheelchair turnaround (60" turning diameter)?	☐			
6.	In unisex toilet rooms, are there safety alarms with pull cords?	☐			
7.	Are stall doors wheelchair accessible (at least 32" wide)?	☐			
8.	Are grab bars provided in toilet stalls?	☐			
9.	Are sinks provided with clearance for a wheelchair to roll under (29" clearance)?	☐			
10.	Are sink handles operable with one hand without grasping, pinching or twisting?	☐			
11.	Are exposed pipes under sink sufficiently insulated against contact?	☐			

EMG Abbreviated Accessibility Checklist					
12.	Are soap dispensers, towel, etc. reachable (48" from floor for frontal approach, 54" for side approach)?	☐			
13.	Is the base of the mirror no more than 40" from the floor?	☐			

APPENDIX E:
TERMINOLOGY

The following are definitions of terms utilized in this report.

TERMINOLOGY	
Actual Knowledge	Information or observations known first hand by EMG.
ADA	The Americans with Disabilities Act
Ancillary Structures	Structures that are not the primary improvements of the Property but which may have been constructed to provide support uses.
Appropriate Inquiry	A requests for information from appropriate entity conducted by a Freedom of Information Letter (FOIL), verbal request, or by written request made either by fax, electronic mail, or mail. A good-faith one time effort conducted to obtain the information in light of the time constraints to deliver the FCA.
ASTM	American Society for Testing and Materials
Base Building	That portion of the building (common area) and its systems that are not typically subject to improvements to suit tenant requirements.
Baseline	A minimum scope level of observation, inquiry, research, documentation review, and cost estimating for conducting a Property Condition Assessment as normally conducted by EMG.
BOMA	Building Owners & Managers Association
Building	Referring to the primary building or buildings on the Property, which are within the scope of the FCA as defined under Section 2.
Building Codes	A compilation of rules adopted by the municipal, county and/or state governments having jurisdiction over the Property that govern the property's design &/or construction of buildings.
Building Department Records	Information concerning the Property's compliance with applicable Building, Fire and Zoning Codes that is readily available for use by EMG within the time frame required for production of the Property Condition Assessment.
Building Systems	Interacting or interdependent components that comprise a building such as structural, roofing, side wall, plumbing, HVAC, water, sanitary sewer and electrical systems.
BUR	Built Up Roof
Client	The entity identified on the cover of this document as the Client.
Commercial Real Estate	Real property used for industrial, retail, office, agricultural, other commercial, medical, or educational purposes, and property used for residential purposes that has more than four (4) residential dwelling units.
Commercial Real Estate Transaction	The transfer of either a mortgage, lease, or deed; the re-financing of a commercial property by an existing mortgagee; or the transferring of an equity interest in commercial property.
Component	A piece of equipment or element in its entirety that is part of a system.
Consultant	The entity or individual that prepares the Property Condition Assessment and that is responsible for the observance of, and reporting on the physical condition of Commercial Property.
Dangerous or Adverse Conditions	Situations which may pose a threat or possible injury to the Project Manager, or those situations which may require the use of special protective clothing, safety equipment, access equipment, or any precautionary measures.
Deferred Maintenance	Deficiencies that result from postponed maintenance, or repairs that have been put off until a later time and that require repair or replacement to an acceptable condition relative to the age of the system or property.
Dismantle	To take apart; disassemble; tear down any component, device or piece of equipment that is bolted, screwed, secured, or fastened by other means.
DWV	Drainage Waste Ventilation
EIFS	Exterior Insulation and Finish System

TERMINOLOGY	
EMS	Energy Management System
Engineering	Analysis or design work requiring extensive formal education, preparation and experience in the use of mathematics, chemistry, physics, and the engineering sciences as provided by a Professional Engineer licensed to practice engineering by any state of the 50 states.
Expected Useful Life (EUL)	The average amount of time in years that a system or component is estimated to function when installed new.
FEMA	Federal Emergency Management Agency
FFHA	Federal Fair Housing Act
Fire Department Records	Information generated or acquired by the Fire Department having jurisdiction over the Property, and that is readily available to EMG within the time frame required for production of the FCA.
FIRM	Flood Insurance Rate Maps
FM	Factory Mutual
FOIA	U.S. Freedom of Information Act (5 USC 552 et seq.)
FOIL	Freedom of Information Letter
FRT	Fire Retardant Treated
Guide	A series of options or instructions that do not recommend a specific course of action.
His	Referring to either a male or female Project Manager, or individuals interviewed by the Project Manager.
HVAC	Heating, Ventilating & Air-conditioning
IAQ	Indoor Air Quality
Immediate Repairs	Physical deficiencies that require immediate action as a result of: (i) existing or potentially material unsafe conditions, (ii) significant negative conditions impacting tenancy/marketability, (iii) material building code violations, or (iv) poor or deteriorated condition of critical element or system, or (v) a condition that if left "as is", with an extensive delay in addressing same, has the potential to result in or contribute to critical element or system failure within one (1) year.
Interviews	Interrogatory with those knowledgeable about the Property.
Material	Having significant importance or great consequence to the asset's intended use or physical condition.
MEP	Mechanical, Electrical, and Plumbing
NFPA	National Fire Protection Association
Observations	The results of the Project Manager's Walk-through Survey.
Observe	The act of conducting a visual, unaided survey of items, systems or conditions that are readily accessible and easily visible on a given day as a result of the Project Manager's walk-through.
Obvious	That which is plain or evident; a condition that is readily accessible and can be easily seen by the Project Manager as a result of his Walk-through without the removal of materials, moving of chattel, or the aid of any instrument, device, or equipment.
Owner	The entity holding the deed to the Property that is the subject of the FCA.
FCA	Property Condition Assessment, the Purpose and Scope of which is defined in Section 2. of this report.

TERMINOLOGY	
Physical Deficiency	Patent, conspicuous defects, or significant deferred maintenance of the Property's material systems, components, or equipment as observed during the Project Manager's Walk-through Survey. Material systems, components, or equipment that are approaching, have realized, or have exceeded their typical Expected Useful Life (EUL); or, that have exceeded their useful life result of abuse, excessive wear and tear, exposure to the elements, or lack of proper or adequate maintenance. This definition specifically excludes deficiencies that may be remedied with routine maintenance, miscellaneous repairs, normal operating maintenance, and conditions that do not present a material deficiency to the Property.
PML	Probable Maximum Loss
Practically Reviewable	Information that is practically reviewable means that the information is provided by the source in a manner and form that, upon examination, yields information relevant to the property without the need for extraordinary analysis of irrelevant data.
Practice	A definitive procedure for performing one or more specific operations or functions that does not produce a test result.
Primary Improvements	The site and building improvements that are of fundamental importance with respect to the Property.
Project Manager	The individual Professional Engineer or Registered Architect having a general, well rounded knowledge of all pertinent site and building systems and components that conducts the on site visit and walk-through observation.
Property	The site and building improvements, which are specifically within the scope of the FCA to be prepared in accordance with the agreement between the Client and EMG.
Readily Accessible	Those areas of the Property that are promptly made available for observation by the Project Manager without the removal of materials or chattel, or the aid of any instrument, device, or equipment at the time of the Walk-through Survey.
Reasonably Ascertainable	Information that is publicly available, provided to EMG's offices from either its source or an information research/retrieval concern, practically reviewable, and available at a nominal cost for either retrieval, reproduction or forwarding.
Recreational Facilities	Spas, saunas, steam baths, swimming pools, tennis courts, playground equipment, and other exercise, entertainment, or athletic facilities.
Remaining Useful Life (RUL)	The consultant's professional opinion of the number of years before a system or component will require replacement or reconditioning. The estimate is based upon observation, available maintenance records, and accepted EUL's for similar items or systems. Inclement weather, exposure to the elements, demand on the system, quality of installation, extent of use, and the degree and quality of preventive maintenance exercised are all factors that could impact the RUL of a system or component. As a result, a system or component may have an effective age greater or less than its actual age. The RUL may be greater or less than its Expected Useful Life (EUL) less actual age.
Replacement Costs	Costs to replace the system or component "in kind" based on Invoices or Bid Documents provided by the current owner or the client, construction costs developed by construction resources such as *Means* and *Dodge*, EMG's experience with past costs for similar properties, or the current owner's historical incurred costs.
Replacement Reserves	Major recurring probable expenditures, which are neither commonly classified as an operation or maintenance expense. Replacement Reserves are reasonably predictable both in terms of frequency and cost. However, they may also include components or systems that have an indeterminable life but nonetheless have a potential liability for failure within the reserve term.
RTU	Rooftop Unit
RUL	Remaining Useful Life (See definition)

TERMINOLOGY	
Short Term Repair Costs	Opinions of Costs to remedy Physical Deficiencies, such as deferred maintenance, that may not warrant immediate attention, but requiring repairs or replacements that should be undertaken on a priority basis, taking precedence over routine preventive maintenance work within a zero to one year time frame. Included are such Physical Deficiencies resulting from improper design, faulty installation and/or substandard quality of original system or materials. Components or systems that have realized or exceeded their Expected Useful Life (EUL) that may require replacement to be implemented within zero to one-year time frame are also included.
Shut-Down	Equipment or systems that are not operating at the time of the Project Manager's Walk-through Survey. Equipment or systems may be considered shutdown if it is not in operation as a result of seasonal temperatures.
Significant	Important, material, and/or serious.
Site Visit	The visit to the property by EMG's Project Manager including walk-through visual observations of the Property, interviews of available project personnel and tenants (if appropriate), review of available documents and interviews of available municipal personnel at municipal offices, all in accordance with the agreement for the Property Condition Assessment.
Specialty Consultants	Practitioners in the fields of engineering, architecture; or, building system mechanics, specialized service personnel or other specialized individuals that have experience in the maintenance and repair of a particular building component, equipment, or system that have acquired detailed, specialized knowledge in the design, assessment, operation, repair, or installation of the particular component, equipment, or system.
Structural Component	A component of the building, which supports non-variable forces or weights (dead loads) and variable forces or weights (live loads).
Suggested Remedy	A preliminary opinion as to a course of action to remedy or repair a physical deficiency. There may be alternate methods that may be more commensurate with the Client's requirements. Further investigation might make other schemes more appropriate or the suggested remedy unworkable. The suggested remedy may be to conduct further research or testing, or to employee Specialty Consultants to gain a better understanding of the cause, extent of a deficiency (whether observed or highly probable), and the appropriate remedy.
Survey	Observations as the result of a walk-through scan or reconnaissance to obtain information by EMG of the Property's readily accessible and easily visible components or systems.
System	A combination of interacting or interdependent components assembled to carry out one or more functions.
Technically Exhaustive	The use of measurements, instruments, testing, calculations, exploratory probing or discover, and/or other means to discover and/or troubleshoot Physical Deficiencies, develop scientific or Engineering findings, conclusions, and recommendations. Such efforts are not part of this report unless specifically called for.
Term	Reserve Term: The number of years that Replacement Reserves are projected for as specified in the Replacement Reserves Cost Estimate.
Timely Access	Entry provided to the Project Manager at the time of his site visit.
UST	Underground Storage Tank
Walk-through Survey	The Project Manager's site visit of the Property consisting of his visual reconnaissance and scan of readily accessible and easily visible components and systems. This definition connotes that such a survey should not be considered in depth, and is to be conducted without the aid of special protective clothing, exploratory probing, removal of materials, testing, or the use of special equipment such as ladders, scaffolding, binoculars, moisture meters, air flow meters, or metering/testing equipment or devices of any kind. It is literally the Project Manager's walk of the Property and observations.

APPENDIX F:
RESUMES FOR REPORT REVIEWER AND FIELD OBSERVER

CARLTON T. BATTLE

Deputy Program Manager

Education

- BS, School of Architecture, Syracuse University, NY, 1994

Project Experience

- ***Government Agency/Warehouse and City Yard, McGuffrey Art Center, Market St. Parking Garage, Charlottesville, VA*** – As a Field Technician, Mr. Battle performed Property Condition Assessments of these various properties. He reviewed the condition of the building structure and systems and developed a thorough report. his work helped EMG complete this project on schedule and within the budget.
- ***GE Capitol Corporation, Commercial Finance/Gates of West Bay, Norfolk, VA*** – Mr. Battle completed a Property Condition Assessment of this multifamily housing site. During his evaluation of the facilities, he conducted interviews with the property manager and maintenance staff. His findings included information on existing building conditions, site improvements, mechanical and electrical systems and code and accessibility information.
- ***Midland Annual Inspections/Columbia Gateway Commerce Center, Columbia, MD*** – As Field Technician, Mr. Battle applied his expertise to the assessment of this property. He assessed this 1,214,603 SF multiple office building community, utilizing a customized EMG methodology, having performed a Property Condition Assessment. Mr Battle findings equipped the client with the information to make an effective business decision.
- ***Bear Sterns/Smyrna Mart Shopping Center, Smyrna, DE*** – Mr. Battle, a professional well-versed in this industry's standards, performed an Environmental Phase I Assessment and a Property Condition Assessment on this 150,000 square foot retail property. His knowledge of structural and mechanical building elements was crucial to the level of detail required for this assessment. His report was clear and concise, yet thorough. He provided the information that was essential to the client's needs.

Industry Tenure

- A/E: 1990
- EMG: August, 2004

Related Experience

- National Retail banking Portfolio

Industry Experience

- Industrial
- Commercial

Special Skills & Training

- AutoCAD 2002

Memberships

- U.S. Green Building Council, National Chapter
- Greater Baltimore Technology Council
- The Baltimore Architectural Foundation
- The American Institute of Architects

Regional Location

- Baltimore, MD

DARRIN K. HOLLY, PE

Senior Engineering Consultant

Education

- Masters of Science in Engineering Management at University of Maryland
- Bachelors of Science in Mechanical Engineering at University of Delaware

Project Experience

- ***Vistula Heritage Village Apartments, Toledo, OH*** – Mr. Holly performed a Mark to Market Program Property Condition Assessment of this 250 unit multi-family property. This included observations of the buildings and systems, review of previous reports, interviews with property staff and research of municipal records. His engineering expertise was critical in defining the condition of this property and provided the client highly valuable information.
- ***1330 7th Street Apartments, Washington, DC*** – Mr. Holly, a professional well-versed in this industry's standards, completed a HUD 223(f) Assessment on this 10-story, 136 unit apartment building. His knowledge of structural and mechanical building elements was crucial to the level of detail required for this assessment. His report was clear and concise, yet thorough. He provided the information that was essential to the client's needs.
- ***Desert Pines Apartments, El Paso, Texas*** – Mr. Holly completed a Tax Credit Assessment of this property that consisted of 22, two-story buildings. During his evaluation of the complex, he conducted interviews with the property manager and maintenance staff. His findings included information on existing building conditions, site improvements, mechanical and electrical systems, and code and accessibility information.
- ***Garden View Health Care, Baltimore, MD*** –Mr. Holly applied his expertise to the assessment of this property. He evaluated this 326 unit health care facility, utilizing a customized EMG methodology, having performed a Government Property Condition Assessment. Mr. Holly's findings equipped the client with the information to make an effective business decision.

Industry Tenure

- A/E: 1991
- EMG: March, 2002

Related Experience

- Affordable Housing/HUD
- Healthcare/Sr. Housing
- Commercial
- Hospitality

Industry Experience

- Housing / Multi-family
- Office
- Industrial
- Hospitality
- Retail

Active Licenses/Registration

- Licensed Professional Engineer, Maryland, License # 23405, since 1998

Regional Location

- Baltimore, MD